DoD Acquisition Insight Days

Contracting for Development Efforts

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Overview

- Background
- Is It Policy?
- What We Learned from Past Acquisition Programs
- Industry Inputs
- Risk Analysis Considerations
- Fixed Price Risk Analysis
- Contract Types
- Incentives and Award Fees
- Other Considerations
- Current Programs
- What Can You Do?
- Take-Aways

Background

- Age old problem; significant cost overruns on development contracts
- Not unique to DoD
  - Transportation
  - Energy
  - Construction
  - Technology projects

Background, cont’d

- GAO report 09-326SP, 30 Mar 09, “Assessment of Selected Weapon Systems”
  - Reviewed 96 DoD major defense programs
  - R&D costs 42% higher than original estimate
  - Causes include:
    - Poor program foundations and inadequate knowledge for developing realistic cost estimates
    - Moving forward with artificially low cost estimates, optimistic schedules and assumptions, immature technologies/designs, and fluid requirements
    - Changing or excessive requirements
    - Imbalance between wants and needs

Background, cont'd

- Moving away from the cost type contracts toward a more fixed price environment
  - What's changed?
- Senator McCain was the forerunner for pushing for expanded use of fixed-price contracts based on realistic cost estimates
- The outcome would be to enforce discipline in the procurement process; ensure clearly defined requirements; realistic schedules; and that costs won't exceed promised price

Is It Policy?

- Section 818 of FY 2007 NDAA repealed Section 807 of the FY 1989 NDAA regarding the determination of contract type for development programs
  - Act required urgent language resulting in Interim DFARS Case 2006-D053
  - As of 22 Jan 10, Office of Information and Regulatory Affairs cleared final DFARS rule; DAR staff preparing for publication
- DODI 5000.02, Enclosure 2, Procedures, EMD Phase
  - Contract type shall be consistent with level of program risk; may be fixed price or cost
- Mr. Van Buren, SAF/AQ, Air Force Acquisition Business Rules of Engagement memo, dated 4 Feb 10, addresses Program Managers and discusses contract types for development programs
  - Weapons Systems acquisitions should normally begin with fixed price incentive fee or cost plus incentive contracts and move to fixed price incentive fee or firm fixed price for production

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Is It Policy? cont’d

- DFARS 234.004 implementation language states Milestone Decision Authority (MDA) shall select, with the advice of the contracting officer, the contract type for a development program at the time of Milestone B approval
  - Include level of program risk and reason for proceeding with Milestone B approval despite the risk
  - The MDA must approve cost-type contract, based on a program being so complex and technically challenging that use of a fixed-price type contract would not be practicable

Is It Policy? cont'd

- Currently accomplished on a case by case basis as programs go forward on developing acquisition strategies
- Goal is to realize the benefits of a fixed price contract where the technology is mature and has already been operationally tested
- Air Force has committed to Acquisition Improvement Plan
  - As part of this *acquisition improvement* plan, the Air Force will emphasize realistic budgeting based on realistic *program* cost estimates
  - This is within keeping with the overall DoD goal

What We Learned from Past Acquisition Programs

- The use of fixed price development contracts was discouraged after programs start overrunning costs
- A400M – "an example of the problem posed by fixed-price contracts." Jacques Gansler
  - EADS officials state seven governments should share the burden of the cost overruns because of changes in contract terms and designs forced on it by these parties
  - A-12 Avenger II, Advanced Tactical Airplane development started in mid-1980's when defense spending less scrutinized.
    - The program was in litigation until June 2009 when US Court of Appeals made its ruling stating Navy justified in canceling program

Industry Inputs

- Contractors say the contractual and financial burdens are placed on the contractor
- They are concerned about a final price for a contract that could last almost two decades
- Boeing Chief Financial Officer James Bell stated “Fixed price development is a tough contract. It is very, very difficult.”

Risk Analysis Considerations

- Four elements must be aligned for successful implementation of this strategy
  - Requirements must be stable, detailed and technically sophisticated
  - Contractors must have clear understanding of the requirements
  - Expert contract negotiations of a fixed price incentive arrangement
  - Willingness to adjust requirements in order to meet the fixed price, if needed

Fixed Price Risk Analysis

- What are the similar development efforts by the known prospective offerors?
- Are specifications precisely defined and how have they been proven?
- How realistic and reliable are the Government's cost estimates?
- Is there an equitable allocation of the risk between the Government and the contractor?
- What are the indications that threat-related programs, and funding priority are sufficiently stable for a low probability of Government-initiated major changes during contract performance?
- What are the "off ramps"?
  - Bottom Line – Conduct a risk assessment

Contract Types

- Types of contracting methods considered for outcome of controlling costs
  - Firm Fixed Price arrangement – Government pays a set price, no matter the contractor’s costs
  - Fixed Price Incentive – Government sets a maximum price, with a negotiated target cost and target profit
  - Cost Plus Incentive Fee
- Fixed Price Award Fee contracts

Contract Types, cont’d

- An award fee contract may be appropriate when contractor performance cannot be measured objectively
  - Provides for an award fee pool
  - Using a “metrics-based award fee criteria” should relate directly to the objectives to be accomplished and accurately measure the intended performance objectives
  - Not currently encouraged
- Incentives are the preferred approach

Other Considerations

- Development and production period of performance will impact schedule and cost constraints
  - May require supporting current technology longer which increases overall program costs
  - Avoid developing and maturing dependent technologies in parallel with system development
- Billing prices must be established for interim payment for fixed price incentive contracts
  - Contractors have valid complaint that cash flow will be impacted.
- If requirements change, expect requests for equitable adjustment from the contractor

Current Programs

- Small Diameter Bomb II (SDB II) a program out of Air Armament Center, is an acquisition pathfinder that is expected to lead the way for acquisition reform
  - Goal to maintain the airframe characteristic, flight dynamics and weight of the original Boeing 250 lb weapon
  - Contract type is fixed-price incentive
- KC-X Tanker is a Boeing 767-based offering
  - Contract type is expected to be fixed-price development
- The Total Integrated Engine Revitalization Program (TIGER) is an Army fixed price incentive contract
  - The program has a transition year with three program year determinations
  - The contractor’s performance is measured by four metrics: engine availability, durability, cost, and weights assigned to four incentive metrics based on events of the particular program year.

What Can You Do?

- Develop acquisition strategy early
- Work with the Acquisition Team and Industry early
- Must enforce strict adherence to agreed upon terms
- Ensure experienced government personnel are assigned to the acquisition with appropriate fact-finding, negotiations, program management and technical skills

Take-Aways?

- Buy the right thing, the right way
- Bold ideas and sweeping changes cause a fear factor when in fact we should focus more on outcomes
- Is more policy needed or do we work with the tools we already have?